

**VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE MEETING MINUTES**  
**Kerr Reservoir Visitors Center, Boydton**  
**October 18, 2006**

**Attendance:** VRRBAC members Senator Ruff, Delegate Wright, Walter Coles, Robert Conner, John Feild, Haywood Hamlet, John Lindsey, Curry Martin, and Charles Poindexter; DEQ: Greg Anderson and Chris Evans; DCR: Wesley Haskins

**Call to Order:**

Chairman Poindexter called the meeting to order.

**Welcome and Recognition of Members and Visitors:**

Chairman Poindexter welcomed everyone and recognized members and guests. Guests present were Bill Brush of the Smith Mt. Lake Association and the Water Conservation Alliance, Chris Evans, DEQ, and Wesley Haskins, DCR.

**April 25, 2006 Meeting Minutes:**

These minutes were approved.

**Virginia's Market Based "Brownfields" Program; Chris Evans, DEQ, Virginia "Brownfields" Coordinator**

Chris welcomed the opportunity to come speak to VRRBAC and delivered a presentation that was an overview of the program and covered recent changes and successes. First he explained what "Brownfields" are.

- "Brownfields" are abandoned, idled, or under-used industrial and commercial property where expansion or redevelopment is complicated by *real* or *perceived* environmental contamination. There are "Brownfields" all over VA. Idled furniture factories & textile mills, mine scarred lands, abandoned gas stations, strip malls with dry cleaners, land fills, salvage & scrap yards, etc. Estimates include hundreds of thousands nationally and 1,500 in Virginia.
- "Brownfields" are a concern due to potential environmental threats and negative economic impacts. It is like the proverbial bad apple in a whole bunch casting a bad shadow on the rest. One business going out of business can start a blighting effect. Property values go down. However, they are attractive real estate opportunities thanks to their location, price, and existing infrastructure.
- "Brownfields" redevelopment unites competing interests. A developer's perspective is that "Brownfields" projects are real estate deals with an environmental component. The market reality is that leveling the financial playing field between green-fields and "Brownfields" is a must. Otherwise the developer will choose the path of least resistance, or the green-field. Economic development is typically the localities objective. DEQ seeks enhanced environmental outcomes including land conservation.
- The bottom line is the bottom line. "Brownfields" are first and foremost real estate transactions. At the end of the day is there money to be made? DEQ has hitched the wagon to the developers profit motive. For DEQ deals equal cleanups and land conservation. Most sites predate the regulations so we often do not have solid enforcement authority. Financially for the developer, does the gain outweigh the pain? Can the financial playing field be tilted towards a "Brownfields"? For localities, can projects they undertake withstand public scrutiny? That is are their issues of risk and safety.

- There have been some State program enhancements in recent years. In July 2002, State “Brownfields” Legislation became effective. This legislation intended to fill liability, cost, and time gaps. Liability can be environmental in nature or to the surrounding neighbors (3<sup>rd</sup> party lawsuits). What is the extra cost of due diligence with the property? Finally, what is the time frame required to get the clean up done? In real estate time is money. The new legislation provided amnesty to property owners from civil penalty/fines for voluntary disclosure. It included limitations on liability for buyers and also other acquisition scenarios, such as involuntary acquisition by a governmental entity.
- There is now a “Brownfields” fund that has been created, with the money going for upfront site assessments. However at this point no funds have been appropriated.
- There is now a draft agreement between DEQ, VEDP, and VRA in place.
- There is a Memorandum of Agreement (MOA) with EPA that constitutes no federal interest in voluntary cleanups. That is EPA won’t pursue federal enforcement. This is important because even though the developers feel good about DEQ they are still a little leery of the EPA. This offers assurance that EPA will not over file on Virginia.
- There are low interest loans for cleanups via Clean Water Revolving Loan Fund.
- There is also once a year competitive EPA grant money to perform a limited number of site environmental assessments.
- “Brownfields” redevelopment makes dollars and sense. It is working for a number of reasons. DEQ is earning trust and credibility with its customers. They are learning we do not beat them up when they bring contaminated property to us. It is a common sense, market based program where DEQ views itself as a business partner. DEQ isn’t the customer...the customer is. There is a strong agency commitment to being helpful. We facilitate, rather than just regulate. The DEQ staff is trained, sensitive, and empowered to help. There has been strong support from Governor Warner and this continues with the current administration of Governor Kain and Secretary Bryant. I believe everyone understands “Brownfields” redevelopment as a win-win situation.
- Clean-ups can be accomplished two ways. They can be regulated based on RCRA, Solid Waste, and/or Underground Storage Tank regulations or conducted voluntarily. The time to remediate varies from site to site. Many times these sites are not subject to regulation. DEQ does not have a set of rules that lay out details of clean-ups in these situations. The Voluntary Remediation Program (VRP) accomplishes that and complements the “Brownfields” program very nicely. It allows risk based endpoints taking into account engineering and institutional controls to protect human health and the environment. There have been about 250 sites enrolled in the VRP with around 150 completed and received certificates to date. The Voluntary Remediation Program has a very favorable reputation among clients.
- Virginia’s program offers numerous advantages including strong agency support. It offers an expedited process, where liability comfort letters are turned around in 3 weeks or less. That is unheard of in State Government to turn around liability protection in the short of a period of time. The regional personnel do a tremendous job in conducting their review so that this can be done. The “Brownfields” Coordinator works to help facilitate deals. I have a unique role in the agency in that I have no regulatory authority, so I can discuss projects without disclosing details to a regulator. There is full EPA support as the Virginia program is highly regarded to the point that other states are emulating our program. The Federal “Brownfields” legislation gives Virginia significant authority. They have enough superfund sites to manage. These sites are generally much less contaminated.
- As stated before environmental cleanups are conducted at “Brownfields” through the Voluntary Remediation Program or as required by regulation. Historically cleanups are done prior to

development. We prefer that it be done on a parallel track, that is if you dig, dig once. It saves money and puts equity back into the site. If you are digging up contaminated soil it makes no sense to dig that soil up, replace with clean fill, and then re-dig to place a footer. You can clean up and develop at the same time. We can tailor a VRP site clean up per the development plan and we can adapt to any plan changes. There was a group of 4-5 contiguous "Brownfields" sites down on the James River at Rockett's Landing. Bill Abeloff arranged to buy the property if the owners would enroll in the VRP, and he would take on the responsibility to clean it up. They all enrolled and agreed to sell if he would assume responsibility for the cleanup. He came to DEQ and said I have all this property but the market may want me to build the food center prior to the condominiums but I may prefer to build the town-homes first. We said, that's fine. Whatever you want to build first, give us advance notice and we will call that footprint a VRP site and issue a number. When you are done we will give you a certificate and you will be ready to move forward. That is a very powerful tool, to be able to remediate and develop simultaneously.

- Chris then told a couple stories of meetings with business people that highlighted how the new legislation had enhanced the attractiveness of doing business with these sites in Virginia. When he first started with DEQ as the "Brownfields" coordinator he met with a businessman in Bristol who wanted to buy a site and wanted to know what the State could do for him. He asked can you shield me from liability. The answer was no and I never heard from him again. Fast forward a few years and I am sitting in my office on a Thursday and a gentleman from NC called while sitting on the Burlington property in Clarksville. He asked questions and you could tell in his voice he expected negative answers. He said I will only consider buying this property if it is a "Brownfields". What will it cost, what is the process, and how long will it take? I said well it is a "Brownfields", it does not cost anything for a comfort letter, and once I have your environmental due diligence, I can get that to him in 2 weeks. Dead Silence! Did you say 2 weeks? Yes sir. He then went on a rant about how difficult it was to do this in other States. I told him Virginia does not make it difficult for people to pit these sites back into productive use. He also had questions concerning the various permits, including the water intake and treatment plant. I put together a regional project team to get answers to his questions. By the following Tuesday the project team and I had a conference call with him and his investors and within 30 minutes he was completely satisfied.. He got me the information I needed to do his comfort letter and within 2 weeks he had it. In less than a month he was owner of that property. He then flipped it to a developer in DC who is looking at options of what to do with the site. There is a lot of excitement with what to do with that site. He would have never considered the site without it being a "Brownfields" site and receiving the liability protection.
- There can be a significant financial windfall with these sites. They attract capital reinvestment, increase local tax revenue, stimulate local economy, increase adjacent property values, retain jobs, create jobs, conserve land, and ease locality infrastructure expenses. If you do not have to expand utilities to the property you are saving major development expenses.
- Since August 2003 the "Brownfields" Program has facilitated 63 redevelopment projects resulting in 524 million dollars being reinvested. This is an average of 8.32 million reinvested per site. 1,393 full time jobs have been created or an average of 22 new full time jobs per project. 3,190 part time jobs have been created, an average of 50 part time jobs created per project. 488 jobs were retained at 4 different businesses. These figures are based on information supplied to us from only 25% of the projects. Based on what I know of the sites, I believe the figures would actually be higher if we had all the data.
- Land conservation benefits are apparent also. 195 acres have been reused, an average of 3.1 acres per site. EPA estimates that for every acre of "Brownfields" reused, 4.5 acres of "Greenfield" is left undeveloped so this is equivalent to 877 acres of land conserved.
- There are also value added returns as "Brownfields" redevelopment reverses concentric blight effect. Adjacent property values increase and become more attractive to buyers. Business attracts business, as evidenced by Rocketts Landing increasing interests in the Fulton Gas Works property.

I used to get maybe one call a year about that site. After Rocketts Landing was announced I got several calls a week. This was instant recognition of the adage that business attracts business. You reverse blight, you take a "Brownfields" site and redevelop it and make it something positive the areas around it become positive also. The Rocketts Landing development is a 250 million dollar investment on what used to be 5 underutilized industrial sites. Since Localities save money in infrastructure expansion/improvements on acres reused. The local economy is stimulated. Sprawl is slowed.

- There are some basic market realities and challenges associated with "Brownfields". Two "Brownfields" opportunity models seem to exist in Virginia. First a quick turn, market driven real estate opportunity and second a long term, community development projects. A Phase I ESA, which is essentially a site history, for "Greenfield" development costs ~ \$3,500 whereas a Phase II ESA, a complete environmental assessment, for a "Brownfields" costs \$50,000 - \$75,000. This study is required by lenders and the money to do it is the biggest risk in a deal. Therefore this is the biggest obstacle to getting deals started. The good news is that even though 100% require site assessments, only 20% of "Brownfields" sites actually require physical remediation. Some sites require deconstruction and others require hazardous waste removal. The problem is that the environmental costs are front loaded. If the "Brownfields" fund was appropriated, it would seed many more projects by providing pivotal site assessment dollars. The States that provide those dollars are the ones doing the most brisk "Brownfields" business. They provide complete environmental assessments on the property so there are no unknowns going in for the developers.
- Chris then highlighted a couple success stories of market driven real estate opportunities involving "Brownfields". Kenbridge was a previous industrial site that sat fallow for years due to lack of assessment dollars. DEQ paid for site assessment using an EPA grant. Little contamination was found and the site was VRP eligible. DEQ issued a "Brownfields" liability comfort letter. The buyer contracted to purchase the property on the strength of the site assessment and "Brownfields" liability comfort letter. Environmental questions were answered and the buyer was comforted by DEQ review. The deal closed in late March and the site is probably to be being reused to distribute high end car parts. The second example is a community development success story in Lynchburg. There were two properties, one a contiguous industrial site and the other a nursery site. Both were adjacent to a newly renovated minor league ballpark and were eyesores and public nuisances. The sites sat idle for years due to lack of assessment dollars. DEQ paid for both site assessments using EPA grants. Little contamination was found and the sites were VRP eligible. DEQ issued a "Brownfields" liability comfort letter for each site. The industrial site was redeveloped for parks and recreation expansion which compliments the recently renovated minor league ball park. There are public use facilities (buildings, parking, etc), public ball fields, and creation of green space. The nursery site was converted to an organic farming operation which provided workforce development for handicapped and others. It is a sustainable operation using various waste minimization techniques. Public vegetable and flower garden plots are available.
- So the key to success in making these sites productive again is to provide assessment costs and the liability comfort letters.
- DEQ's "Brownfields" Website is at [www.deq.virginia.gov/Brownfieldsweb](http://www.deq.virginia.gov/Brownfieldsweb) The site provides a great amount of information. There is free advertising for businesses such as developers, attorneys, consultants, lenders, etc, an available sites inventory via the Virginia Economic Development Partnership, a "Brownfields" Wanted listing, where developers/investors advertise for sites they seek, and funding information regarding the Clean Water Revolving loan fund which provides low interest loans for redevelopment projects.
- Chris closed the presentation with a discussion of how Virginia can best compete in the "Brownfields" arena. There are hundreds of millions of capital investment dollars waiting to be spent somewhere. We had a "Brownfields" conference in Richmond last March and hosted a "Lets Make a Deal" event. Anyone who had a "Brownfields" property for sale was given a free booth and investors/developers were invited in to walk around and shop for property. DEQ personnel

were not allowed in the room. One investor said he was bringing 50 million dollars to spend and I want to spend every penny of it at your conference. Where those capital reinvestment dollars go you get all those things we talked about, that is you increase local tax revenue, stimulate local economy, increase adjacent property values, retain jobs, create jobs, conserve land, and ease locality infrastructure expenses, etc.. The State must continue top level support of "Brownfields" redevelopment. It must appropriate the fund and should consider additional measures including creative tax and other incentives. The financial playing fields must be tipped in favor of the "Brownfields" sites so that the developers will buy them. Then the other benefits will come. I think about CarMax. They sell cars but they market confidence. People know now they can buy a used car without getting burned. We must continue to engage and educate economic developers, city planners/managers, professional service providers, etc.

- Chris says when he meets with developers at the DEQ office they come in with a lawyer or two and a consultant in tow. They come to the agency and expect to get pushed back. He tries to go to their office because it is friendlier. Usually the meeting starts off with if I buy this thing what are you going to make us do. I say what do you need from DEQ to get the deal done? It is liability, cost or time and generally liability. I can ask a couple questions and get them an answer on liability protection eligibility. Next is how long will it take. Answer is generally two or three weeks. If there is clean up required what will I need to do. That is another discussion, but we partner and if we can do something we will. It changes the complexion of the whole deal.
- **Question: Senator Ruff asked "Does DEQ negotiate upfront what the remediation will be"?** Generally we do. When a commercial or industrial property is being sold and there is a bank loan, the bank requires that environmental due diligence be done. This is conducted with a phase 1 and/or phase 2 site assessment. DEQ evaluates these to give the buyer an idea of what we might require before they buy the property. Then a cost can be put on the obligation and a determination can be made whether to buy the property or not.
- **Question: Bob Conner asked "Does the comfort letter release the property owner from any liability? No sir. Is that a letter from you releasing him from any penalties?"** There is a buyer and a seller in any real-estate deal. The amnesty is what we offer the seller that is we tell him if you make a voluntary disclosure you will not be assessed penalties and fines. We will work with you and help you market the property. The liability comfort letter the buyer that he is no longer liable under federal regulation for past releases at the site. So the question is "Who is liable for past releases"? The way the federal law is written is that if you have ever been in the chain of ownership you are a "potentially responsible party" (PRP). This means that if there is a contamination issue at the site the previous chain of owners are responsible. This liability was the disincentive to buy these properties because the new owner would join the chain of previous owners and whoever had the deepest pockets would end up footing most the clean up bill. The federal and state laws sever the liability for past transgressions for the new owner if he does the right things prior to purchasing the site. That is the new owners are no longer liable to the governmental agencies. They are still potentially liable to 3<sup>rd</sup> party claims.
- **Question: Bob Conner asked "What safety valve do you have in there to ensure that the buyer follows through his end of the deal so that the benefits can occur."** We have talked about this and most of the localities will do a tax based financing and pay it off based on tax revenue. They won't ask the developer to pay us back anything. They see the long term benefit. But you bring up a good point; if and when the fund is appropriated what guarantees should be in place.
- **Question: Walter Coles said in Danville we have Dan River Mills and in Hurt Burlington who is leaving. Under the current regulatory framework are they required to clean up?** As long as there is a permit requirement, enforcement orders, some reporting requirement, or a tank closure, etc. There needs to be a hook in them. In New Jersey they have a law that requires any industrial property is transacted to make a full disclosure of environmental issues.

- **Question: Charles Poindexter asked if there were any landfill cases.** Yes, the location of the Patent and Trademark Office in Northern Virginia is an old landfill and also Carlile Development.
- **Statement:** Delegate Wright complimented Chris and DEQ on such a sound program. It is unusual to see this type of interaction with communities from a regulatory agency. It is very business friendly and it is the way it should be. In Kenbridge there are 2-3 sites that come to my mind down there and one of them is the railway ?? site. It has been an eyesore for the community. Cleaning that place up would be invaluable to the Community. It is one of the first things you see as you come into town from Victoria. It is right across from a shopping center and motels are close by. The property as you say had perceived problems that just are not real. The Town has just gone through a revitalization project and there is an industrial park close by. Utilities are there and broadband fiber is right there in site of the property. This would be a good one to get cleaned up. Keep up the good work.
- **Statement:** Bob Conner stated said there is a beautiful site in Lawrenceville that used to make logs. They had barrels of all kinds of stuff sitting around that has been treated. There is a nice building and parking lot that is fenced. It has really made a difference in cleaning up the area in this small town.
- **Question: Haywood Hamlet asked if Chris would come to a locality and speak.** Yes, I do that as often as I am invited. One of the challenges we have is to find inventory of sites. I get calls every day from developers looking for sites. That is why we offer amnesty so that sellers will be comfortable and bring forth these sites. The more people especially community leaders, know about this the better chance we have of getting inventory. A lot of localities who have GIS know where these sites are. You can help facilitate this.
- **Question: Bob Conner said you mention junk yards and there is something going on where there is an effort to remove switches and recover mercury. Do you foresee that this is going to be required?** A State law was passed this year. It is in Acts of Assembly Chapters 16 and 163.

#### **B. Brush, Water Conservation Alliance, "SM Project P-2210 Release Protocol Analysis"**

Bill has addressed VRRBAC on 2 other occasions about the WCA protocol developed by the Protocol Committee of the Water Conservation Alliance. This group was made up of the following members:

J. Johnson Eller, Esq. – Chairman, Altavista, VA  
William Brush – member, Smith Mountain Lake, Bedford County, VA  
J.T. Davis – member, Friends of the Staunton River, Brookneal, VA  
John Lindsey – member, Smith Mountain Lake, Pittsylvania County, VA  
Shelton Miles – member, Citizens for Preservation of the River, Long Island, VA  
William Reidenbach – member, Smith Mountain Lake, Franklin County, VA  
Teresa Rodgers – member, Reservoir Manager, American Electric Power (AEP)

The group looked at the SML project and its impact on the upper and lower basin. Their purpose was to provide technical data to be used to make resource decisions. A report was published in January 2004 and the protocol committee's work was completed. Bill came to update the committee on the protocol progress.

- To reacquaint the members Bill reviewed some of the SML Project particulars with VRRBAC. The main inflows to the project were from the Roanoke, Blackwater and Pigg Rivers. DEQ permits some uses on the river that requires flows at Altavista to be at 720 CFS unless a variance is in place where it is allowed to drop to 360 CFS. There are power needs, industrial needs, water supply needs, and effluent simulation capacity needs. When you get down to Brookneal there are striper spawning flow needs. During the spawn 2000 CFS is needed for 19 days (by license Article 34). The project size is 23,870 acres, with 20,600 acres in Smith Mt. Lake (SML) and 3,270 acres in Leesville Lake (LL). Together the volume is 389,750,381,100 gallons of water. At Kerr Reservoir there is a guide curve which is used to maintain adequate recreational levels during the summer

months. Nothing like that exists for the SML project. The original license stated you will release 650 CFS regardless of the inflows to the project. That was not modified until the year 2000 with a new provision. In the model and presentation the terminology SML adjusted level refers to full pond for both lakes. This equates to the water level being at 795 ft. at SML and 600 ft. at LL. The terminology SML Actual means the actual SML level only. The discharge protocol is for Leesville Dam and is 650CFS Average / Week or 12,603,181,500 gallons/mo. 1.0 ft. of lake level is equal to 400 CFS for one Month or 7,755,804,000 gal/month. There is no loss of water for Power Generation. It is a pumped storage peaking facility. APCo releases water from SML to generate power when rates are high and pump it back to SML from LL when rates are lower. LL can store up to 2 feet of water from the upper SML reservoir and during power generation and pump-back cycles, LL will see its level vary between 600 feet and 613 feet.

- A volumetric analysis was developed in Microsoft Excel that postulated possible release protocols from Leesville dam, and projected stream flow for each different release protocol at the downstream points of Altavista, Brookneal and Randolph, VA. It should be mentioned that a 1.6 adjustment factor was applied to account for inflows entering the system below the Roanoke, Blackwater, and Pigg USGS flow gages. The major side flows downstream are Goose Creek and Big Otter River. The volumetric model utilizes measured historical inflows from the Roanoke River, Blackwater River and Pigg River into Smith Mountain and Leesville Lakes. ACOE historical mean monthly evaporation rates from Philpott Lake were used to estimate evaporation for this project. AEP Hourly Data from 1998 thru 2002 were used for the Leesville Release and SML Adjusted Level. Release rates from Leesville Dam are varied in accordance with the protocol design. The Excel spreadsheet calculates the impact of the release protocol upon lake levels and downstream flow-by requirements at Altavista, Brookneal and Randolph, VA. Using this methodology, the committee was able to evaluate the performance of each proposed protocol under identical conditions. In 1960 when FERC licensed the project they did not use the technology that is available today to analyze river flows. The inflows to the project are very cyclical. So the FERC established the minimum release to be less than the lowest average weekly inflow into the project. Hydrologists do not usually work in averages. So the WCA looked at years where river flows at Randolph were less than 60 % of the average for 6 or more months out of that year. There are 12 years between 1967 and 2002 that met these criteria and we designated those years as low flow years. For example instead of seeing inflows of 2300 CFS in the spring, you may see only 1300 CFS during a drought or low flow year. In July inflows can plummet to 350 CFS. Then to maintain the 650 CFS release the project must draw SML down. This is OK as long as the approach is balanced. So basically when you look at averages everything is OK but when you get into drought type years the current protocol does not work in a balanced manner.
- The "Graduated Step Release Protocol" has seasonal objectives in order to conserve water to meet required needs. The goal is to keep the reservoir as full as possible to store or "bank" water upstream so that the water resource is available to service downstream needs during a protracted drought.
- Between October 15 and March 1 the goal of the protocol is to restore full pond conditions. The recreational needs are less during this period and if the project is not full, the protocol would reduce releases to more rapidly restore the project to full pond. To accomplish this objective, a minimum of 350 CFS from Leesville would be released, but only if necessary. It is doubtful that the 350 CFS minimum release would be invoked during these months because these are typically high flow months, even during drought years. When the project is full, the project is operated as a "run of the river" project.
- In the spring our objective is to supercharge the project to 795.3 feet. Therefore, from March 1 to the start of Striper Spawn the SML dam would be filled above full pond, and releases at Leesville could drop to 525 CFS, if necessary.
- During a low flow year from about April 15 to May 30 the release could fall to at a minimum of 525 CFS, if necessary, to support the striper spawn, because we can count on inflows from the other

side streams to maintain river flows at Brookneal at 1150CFS. This is contrasted with the current policy of releasing 1100 CFS from LL. It is doubtful that you would ever have to drop to the 525 CFS during these months because the inflows are typically higher, even during the drought years. So you would still have a robust flow to stimulate a good striper spawn.

- The summer objective from the end of the spawn to October 15 is to support fisheries in the river and reservoir as well as upstream and downstream recreation. When inflows are less than outflows and when the project level falls to 794 feet, we propose releases from Leesville be reduced by 23% to 500cfs to slowdown or stabilize the rate of fall in the project. However, if project levels continued to fall and project adjusted elevation reached 793.5', the protocol would reduce releases to 400 CFS (a 38% reduction from the current minimum of 650CFS). Under each of these conditions the calculated flow at Altavista never falls below 360CFS. At the 500CFS release, downstream recreational releases provide adequate flows 12 hour per day, seven days per week. At the 400CFS minimum release, downstream recreational releases occur on the weekends for daytime canoeing.
- This means there is a better way to balance the water in the reservoir and the flows downstream under drought conditions. The inflows to the project from 9/1998 – 9/2002 were very low on average. AEP's record during this period shows a lot of releases below 650CFS, which means AEP requested and received a variance. This demonstrates that the current 650CFS minimum release protocol does not work under low inflow or drought conditions. Low flow conditions are a very natural condition of this river. Project operation shouldn't require variances, we should be following those natural flows. If the "Graduated Step Release Protocol" was followed during this time frame, the release would have been lowered earlier preserving water in the reservoir for use during the protracted drought. In Jan 99 there would have been an additional 4 feet of water in this reservoir. That is a resource that can be used to manage the reservoir and downstream flows during protracted drought conditions. Please recall that 1 foot of project water level is equivalent to a release of 400 CFS for one Month or 7,755,804,000 gal/month.
- The performance of the "Graduated Step Release Protocol" is reportedly superior to the other methods looked at in the group's analysis. It is balanced in meeting up and down stream needs and reacts earlier to low inflow conditions. Flows can be pulsed to better serve daytime recreational needs on the downstream river. It performs better than the current protocol during expected low inflow conditions. It considers future public water withdrawals. One important advantage includes maintaining Smith Mt. Lake levels above the 792-ft. Public Safety Threshold. The 2 foot power generation pool can cause the actual level in Smith Mountain Lake to fall well below the 792-ft level, when the adjusted project elevation is at 793 feet. When actual levels fall below 792', this becomes a major concern at the lake as fire and rescue response at SML depend upon adequate water to reach houses in coves which otherwise may not be deep enough. Nighttime boating accidents/incidents increase due to shallow waters, the navigation system does not work as well, because not all shoals are properly marked, and insurance rates could possibly be affected. The "Graduated Step Release Protocol" meets all needs downstream and these dangerous low water conditions could be avoided in all but the worst of droughts. Nighttime boating accidents due to shallow waters might be reduced, navigation would be improved, etc. Other water level issues include recreational inconveniences with use of public ramps and private docks, increased erosion of shoreline, increased weed growth, loss of spawning beds, and negative impacts on the local economy. Public ramps have been closed and people could not get down to their boats from their docks. Much of our lake is rip-rapped to protect the shoreline. However, when the lake levels fall below the riprap, erosion occurs that chews up the shoreline and undercuts and damages the riprap construction that protects the lake during more normal levels. Invasive weeds proliferate in these low water level conditions. One thing I don't believe all State Agencies appreciate is that SML loses its spawning beds in the spring time at these levels. Bait fisherman say you can't catch bait because those spawning beds were lost. Low levels impact economics at the lake because people don't come in the same numbers or as often, marinas can't be reached in some instances, rental boats hulls and lower units are damaged, and businesses around the lake don't have the customers. Finally, it should be mentioned that the protocol committee was unable to reach complete



agreement. Those areas of disagreement were the conditions under which reduced release rates would be triggered.

- We have not been able to test the protocol since it was designed in 2004 because we have had normal water years. There was a request to DEQ to test the protocol this 2006 year during critical times in mid June and August. The feedback received was that this is “not the way we’ve operated in the past...” The way the variance decision is made is that AEP contacts DEQ. Terry Wagner/Joe Hassel with DEQ Water Resources call a teleconference of stakeholders in the basin and consult with DGIF and DCR. Bill Brush was the upper basin stakeholder this year and Shelton Miles of the Long Island area was the lower basin representative. Armed with all of this data, we could not get the State Agencies to change their mode of operation. Right before mid-June we had the first call. I suggested that since the lake was down 1.5 ft. and falling at the rate of one ft./month that we test the protocol. I was told it was too early and to wait until after July 4th, because we might disturb downstream recreation and fishery on the Staunton River. The argument that public safety was being impacted on Smith Mountain Lake was not convincing. Before Labor Day the same scenario unfolded. Luckily before each holiday large rain events re-filled the project. Those that voted to wait look back and say that decision was correct. I believe we just got lucky with the weather.
- An example of inconsistency with current water policy is the Clover Power Plant, which draws cooling water from the Staunton River via a DEQ permit if the flow is > 920 CFS. Below that flow withdrawals can not occur. Clover unfortunately was built with a low storage volume of about 30 days. When their storage level gets down to 10-15 days, plant operations get nervous. If the plant can't get a variance to draw cooling water when flows are below 920CFS, it must shut down. Flows in August at Randolph were in the range of 800-850 CFS. Instead of going to a variance condition, DEQ decided to pulse releases out of the project at a higher rate of around 1100 CFS for 6 hours and then drop it back to about 500 CFS so the average release condition was met. A higher pulse of water would reach Clover about 30 hours following the maximum release so the instantaneous river flow would exceed 920CFS and withdrawal could take place during that pulse. The Smith Mountain project was used to peak river flows so the Clover power plant could operate. On the stakeholder calls this summer, interestingly the only support I got was from Clover Power plant operations who agreed that we needed to preserve levels in the reservoir to service a potential protracted drought. State agencies have no direct accountability to the public for these water policy decisions. The Graduated Release protocol is endorsed by 3 surrounding counties, ALAC and TLAC. In addition to these groups, the Nature Conservancy and the ACOE are favorably impressed. But we could not convince our State Agencies that this was something worthy of testing. Frankly, when an engineer designs something like this relying upon data, it is frustrating when one hears this is not the way we do things. There seems to be a lack of reliance on data and analysis to make these flow decisions. Preliminary FERC SML Project Re-licensing study results are revealing problems with the current protocol. There apparently is a leak in the project reservoir of about 300CFS/day to an underground stream that bypasses Altavista and re-emerges in the Staunton River above Brookneal. This was not discovered during the past 40 years of project operation, until volumetric modeling was performed. The WCA had a hard time balancing flows in its model and now we know why. It also seems that National Scientific Policy that strongly encourages hydro-projects to mimic natural river flows is being ignored. Every river ecosystem needs to be stressed by both floods and low flows to maintain the health of the system.
- The Water Conservation Alliance wants to continue educating and involving Lake and River Community groups such as TLAC/lake and other basin organizations, businesses, and County & State Governments. It plans to be proactive with federal and state officials and agencies and work to assure State agency accountability. It recommends including the Graduated Step Release Protocol in the new AEP FERC License and will continue to encourage testing and study prior to 2010 License.
- **Statement:** John Feild said that Bill and his counterparts have done an excellent job in putting together this model and communicating with the stakeholders throughout the basin. They have

thought through the impacts up and down stream. It is not good that the State Agencies will not test a protocol that has been received favorably by so many. Just because it has not been done this way in the past is no reason why this can not be tested.

- **Statement:** John Lindsey added that FERC was asked about doing this protocol testing and they replied that AEP already had the authority to conduct the testing on a trial basis. It is not FERC holding this up. All of these computations and releases were designed to ensure that all downstream needs were met. That the fisheries and aquatic life uses were not impacted in any way. It has been verified by historical flow and test records. It is not a case to deprive downstream people of water they need. It is simply an effort to better manage the resource and the primary change here is the quickness of response to manage the condition. When inflows drop below outflows you react immediately rather than waiting 30-45 days.
- Bill said in terms of downstream recreation there is an important issue. The Graduated Step Release Protocol accommodates minimum canoeing requirements at the Hales Island complex. What we proposed is not any different from what DEQ did this summer when they were pulsing releases for the Clover Plant withdrawals. The protocol sends recreational releases every 12 hours, if necessary. We can send 650 CFS and then cut it back so that the weekly average release remains at 500 CFS to provide for daytime canoeing seven days per week. We do not want to harm what is an emerging industry down there. However it is not as heavily utilized as we have been told. On Labor Day weekend John Lindsey and I counted how many cars were in the parking lots at Brookneal and Long Island. He counted one on Saturday and I found two on Sunday along with 4 canoes on the river. We were literally told on the telecom that thousands of people would be there. That did not happen. Fortunately we had a good rainfall before the weekend at the lake and had a good turnout. Had that rain event not occurred the levels would have been down 3-4 feet and that would have presented a problem?
- **Question: Curry Martin asked if he understood correctly that AEP has the authority to conduct this testing.** Chairman Poindexter said the AEP takes its advice on the releases from State Agencies. He said he would like to know how the group engages the State Agencies so that they understand the importance of conducting this testing. Balance is the key here. However it needs to be emphasized that the 3 Counties adjacent to the lake are relying more and more on the Maritime Fire Dept. response time. There is definitely a public safety issue. It is a volunteer fire department that receives support financially from the local governments. They can respond much more quickly than the road units. They can fight fires 1000 feet from the shoreline.
- **Question: John Feild asked if AEP power generation would be impacted in any way.** Bill said if anything it would be better for them but AEP says officially there is no impact on generation. **John Lindsey said AEP told him they were neutral as far as this proposal was concerned.**
- **Statement: Senator Ruff said he believed that DEQ probably looks at this one angle at a time when they reach such decisions. It would be a far more effective way to address this problem by putting together a package that would come from the various stakeholders.** Bill said the problem is not the amount released or when but rather when do we start to impact downstream recreation and at what point we throttle back the resource. We were unable to reach an agreement with the Friends of the Staunton River representative on this. They seem to think it is better to just let things run its course until they have to shut down the recreation totally when releases throttle back to a lower minimum. They believe the recreation season is longer this way. I believe this is not the case as you can modulate the release at a level that will not cause more erosion and give them the levels they need. We have been peeling this onion for some time. At first we were told that the fish would die. That's not the case. When comparing USGS measured flows at Brookneal during 1998 thru 2002 and records of DEQ measured dissolved oxygen content @ Brookneal that dissolved oxygen was in the normal range. Then it was total wetted area being lost. The latest study says that below 600 CFS you may lose 10 %. That same ratio applies on the lake. It is a question of balance, equity, and fairness.

- **Question: Chris Evans asked what recourse do you have when the agency appears to be unresponsive.** We have talked to our legislators looking for support. We do not want them to kick the doors open but believe the Agencies may be more responsive to them.
- **Question: Bob Conner asked if they have ever asked them to sit at the table and look at this.** Bill replied that in fact Joe Hassel served on this committee so we started at that point. **Bob suggested that he believed Terry Wagner would come and meet with them and work things out.** We have worked with his staff for the duration here. **Bob said work with him is what I am saying.**

#### **Sub-committee Reports:**

Agriculture and Forestry: Haywood Hamlet had nothing new to report today.

Municipal Interests and Permit Holders (MIPH): John Lindsey had nothing new to report today.

Rivers: No report.

Water: No report

Lake Interests: Bob Conner reported that the Secretary of Agriculture came down to Lake Gaston to view the hydrilla. U. S. Representative Virgil Goode also came. **John Feild indicated that there was a rumor that the USACE was to change the designated flood elevation for Buggs Island Lake/Kerr Reservoir. The raising of this level by 1 foot is complicating real-estate sales because properties that were not in the flood plain are now in it and would require flood insurance. It is something for us to be aware of and perhaps to look into.** Senator Ruff talked to the USACE Colonel and his superior, and Congressman Goode about this probably about a year ago. He thought they were trying to negotiate the level down to a couple inches. The taking of that real-estate would have significant impact to the Corps. Bob Conner said that at Lake Gaston Dominion Power owns the shoreline and there was also talk about flood insurance. That is a costly thing so we should pursue this. Bob Conner and John Feild will work together on this issue to see if and how VRRBAC should address it. It will be listed on the next agenda.

#### **Other Business:**

##### Legislative Comments:

Chairman Poindexter gave the opportunity for the legislative members present at the meeting to discuss any issues.

- Delegate Wright stated that he believed VRRBAC was doing well and making progress. He hopes that NC would come on board soon so that the Bi-State Commission would become functional. **John Feild said that is why we met at this location in hopes that we could get some of their members to join us. We are still doing good work and have facilitated communication up and down the VA basin, and have definitely enhanced our knowledge base. Haywood Hamlet mentioned that the 3 citizen members appointed to serve on the Bi-State Commission have yet to serve.** Delegate Wright asked if anyone had any insight as to the delay. **Bob Conner said he had some thoughts about the reasons. He believed that VRRBAC coming out pretty strong against any inter-basin transfers that would be of detriment to the people of the basin. If you look at the triangle area, Henderson, there are people that are probably interested in taking water from Kerr Lake or Lake Gaston. The representatives are probably not that interested in the committee for that reason. He indicated that he would try and meet with Lucy Allen, NC, to help gauge NC interest in working with the committee.** John Lindsey said he spoke to Lucy Allen a while back and she indicated there was some resistance but she expected that it would be accomplished. John said he planned on discussing this issue with her at the next RRBA meeting in December. **Bob Conner said that while Tommy and Frank are here I want to say that both**

**of them have been a tremendous help in Richmond on supporting the Roanoke River Basin, particularly with the Hydrilla issue in Lake Gaston.** Chairman Poindexter said he likewise appreciated the support and mentioned that SML so far did not have a similar problem but could potentially have one at any time and could need some help. **Bob Conner said at Lake Gaston we waited almost too late.** Delegate Wright closed by complimenting the program today.

- Senator Ruff suggested that VRRBAC work with the Local Governments to make them aware of this “Brownfields” effort. He said this is good public policy and we need to promote getting an inventory of the sites in the basin. A letter to the local officials involved may help get this Committee out in the public eye a little more and it would prompt them to make a list of their source and to perhaps invite Chris down to talk to them. **John Feild said an inventory would be a big step forward.** Chairman Poindexter suggested that we write the letter, asking the localities to inventory their sites, and encouraging them to have discussions with Chris. **Senator Ruff said the letter should mention such benefits as the protection of greenspace, clean up of abandoned sites, etc.** Chairman Poindexter said he would be happy to put something together. A motion was made to write the letter described above. It was seconded and passed unanimously.

#### USACE Recreational Area Closures:

Chairman Poindexter passed out a copy of a presentation by the Corps to the Franklin County Board of Supervisors. There is a summary slide in it. It appears that it is a done deal that they will close the Jamison Mill area at Philpott Lake unless someone wanted to lease it. **John Feild said that the Staunton View area had apparently been removed from the list. The action taken by the impacted local governments has been apparently been successful in keeping this area open.**

#### Funding and Travel Expenditures:

Greg reported that VRRBAC had received \$2000 each year for FY2007 and FY2008 for travel expenditures. DEQ would handle the reimbursements. A State Pocket Travel Guide was passed to each member along with forms to provide personal information to DEQ to manage the reimbursements. Mileage is to be reimbursed at \$0.445 per mile. Based on the limited amount of money available those present seem to want to use the money for the quarterly lunches and for long distance travel. It was emphasized that car pooling should continue to help preserve the money. The best way to meet these priorities is for DEQ to requisition with a local caterer to supply the quarterly lunch. Then the members who choose mileage reimbursement for the trip will come to the meetings prepared to give the mileage and to sign a travel voucher that Greg will file with the DEQ. John Feild thanked Frank and the other legislative members for securing this money.

#### AEP FERC Re-Licensure:

Chairman Poindexter had a report from John Lindsey on the recent meeting regarding the relicensure. John offered to answer any questions about the 3 day meeting. Chairman Poindexter said that the meetings were attended regularly by several members. The main point is that some believe that the consultants hired by AEP probably are not looking at everything that should be looked at.

#### Legislation:

Chairman Poindexter asked if there was any follow up discussion on the legislation passed during the last General Assembly session or recommendations for the upcoming session. Curry Martin believes we perhaps should address the flow issue in the Roanoke/Staunton River that Bill Brush presented today. Senator Ruff suggested the best first course would be to set up some meetings with the stakeholders and DEQ to discuss the issue. If the issue can be solved at the Agency level it will be a lot cleaner than making law, as it can be messier.

**Future Meetings:**

The next meeting will be in Richmond near the end of January once the legislation being considered is filed.  
Greg will poll for a date.

**Adjournment**